SHARP

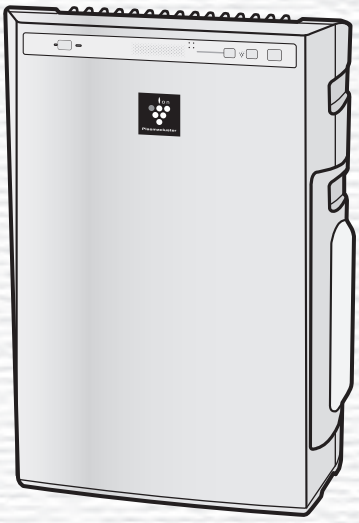
Plasmacluster

*Plasmacluster is a trademark of Sharp Corporation.

KC-930E

AIR PURIFIER
with Humidifying Function
OPERATION MANUAL

ENGLISH



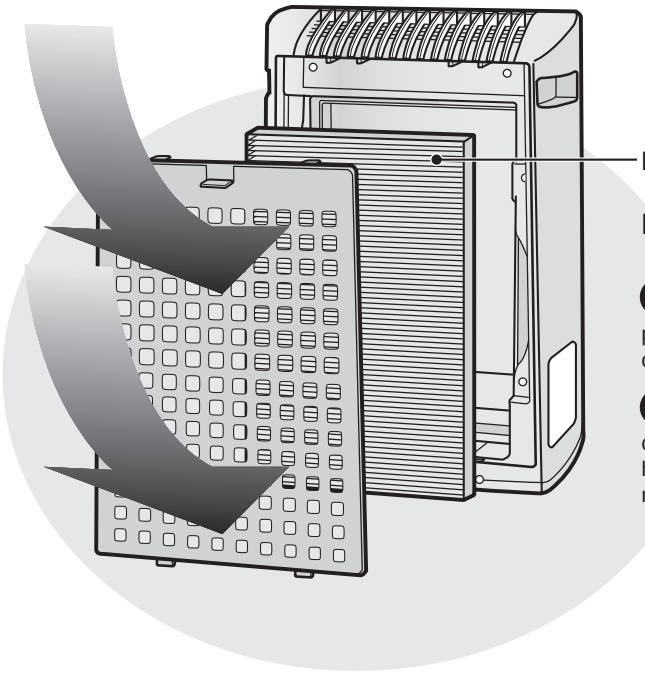
Free standing type

Please read before operating your new Air Purifier

Some odour ingredients absorbed by the filter may become separated and may be discharged through the air outlet and result in additional odour. Depending on the usage environment, especially when the product is used in a condition significantly more severe than household use, this odour may become strong in a shorter period than expected.
In this case we recommend purchasing the optional replacement filter.

NOTE

- The air purifier is designed to remove air-suspended dust and odour, but not harmful gases (for example, carbon monoxide contained in cigarette smoke.) If the odour sources still exist, it cannot completely remove the odour(for example, odours from construction materials and pet odours).
- It is suggested to open the window a bit when you are smoking in order to facilitate ventilation.



Dust Collection / Deodorizing Filter

Elements removed by filter

Dust

pollen, dust, particles of cigarette smoke, pet dander

Odour

cigarette smoke odour, household odour (toilet / raw garbage / pet, etc.)

ENGLISH

FEATURES

"Plasmacluster" technology

Plasmacluster technology uses plasma discharge to produce and release the same positive and negative ions as those found in nature ("Plasmacluster ions").

This is a unique air cleaning technology of the SHARP CORPORATION for breaking down and inactivating such potential allergens as the feacal matter or corpses of aerial mites*1, viruses *2 and mold and bacteria *3 suspended in the air, and has been substantiated by third-party organizations both in Japan and overseas.

When there is a high density of Plasmacluster ions in the air, the smell of cigarette smoke trapped in curtains or sofas is removed in about 80 minutes*4, and when clothing is hung in a place exposed to the direct air expelled from the unit generating Plasmacluster ions, the smell of sweat is reduced to a virtually imperceptible level in one night (about 6 hours).

*1 Graduate School of Advanced Sciences of Matter, Hiroshima University, Japan
Measurement of action on the potential allergens of aerial mites in (13m²)

*2 Retroscreen Virology, Ltd., London, UK
Measurement of ratio of viruses eliminated from the air in a 1m³ box

*3 Ishikawa Health Service Association, Japan
Measurement of aerial mold and bacteria with an air sampler (13m²)

*4 Japan Spinners Inspecting Foundation, Japan
Evaluation of deodorizing effect on odor-imbued fragments of cloth

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Thank you for purchasing the SHARP Air Purifier. Please read this manual carefully for the correct usage information. Before using this product, be sure to read the section: “Important Safety Instructions.”
After reading this manual, retain it in a convenient location for future reference.

IMPORTANT SAFETY INSTRUCTIONS

When using electrical appliances, basic safety precautions should be followed, including the following:

WARNING - To reduce the risk of electrical shock, fire or injury to persons:

- Read all instructions before using the unit.
- Use only a 220-240 volt outlet.
- **Do not use the unit if the power cord or plug is damaged or the connection to the wall outlet is loosened.**
- Periodically remove dust from the power plug.
- **Do not insert fingers or foreign objects into the intake or air outlet.**
- **When removing the power plug, always hold the plug and never pull the cord.**

  Electrical shock and/or fire from short circuit may occur as a result.
- **Do not remove the plug when your hands are wet.**
- **Do not use this unit near gas appliances or fireplaces.**
- **Remove the power plug from the wall outlet before cleaning the unit and when not using the unit.**

  Electrical shock from bad insulation and/or fire from short circuit may occur as a result.
- **When refilling the Water Tank, cleaning the unit, or when the unit is not in use, be sure to unplug the unit. Electrical shock and/or fire from a short circuit may result.**
- **If the power cord is damaged, it must be replaced by the manufacturer, its service agent, Sharp Authorised Service Centre or similarly qualified person in order to avoid a hazard.**
- Do not operate when using aerosol insecticides or in rooms where there is oily residue, incense, sparks from lit cigarettes, chemical fumes in the air or in very high humidity conditions, such as a bathroom.
- Be cautious when cleaning the unit. Corrosive cleansers may damage the exterior.
- Only Sharp Authorised Service Centre should service this air purifier. Contact the nearest Service Centre for any problems, adjustments, or repairs.
- When carrying the unit, remove the Water Tank and Humidifying Tray first and hold the unit by handles on both sides.
- Do not drink the water in the Humidifying Tray or Water Tank.
- Change the water in the Water Tank daily with fresh tap water and regularly clean the Water Tank and Humidifying Tray. (See E-12 and E-13). When unit is not in use, dispose of the water in the Water Tank and Humidifying Tray. Leaving water in the Water Tank and/or Humidifying Tray may result in mold, bacteria, and bad odours.
  In rare cases, this bacteria may cause harmful physical effects.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

  Children should be supervised to ensure they do not play with the appliance.

NOTE - Radio or TV Interference

If this air purifier should cause interference to radio or television reception, try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the unit and radio/TV receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTIONS CONCERNING OPERATION

- Do not block the intake and/or air outlet.
- Do not use the unit near or on hot objects, such as stoves or heaters or where it may come into contact with steam.
- Always operate the unit in an upright position.
- **Always hold the handle on both sides of the unit when moving it.**

  Holding the back panel when carrying may cause it to detach, thus dropping the unit and resulting in bodily injury.
- **Do not operate the unit without the filters, Water Tank, and Humidifying Tray properly installed.**
- **Do not wash and reuse the filter .**

  Not only does it not improve filter performance, it may cause electrical shock or malfunction.
- **Clean the exterior with a soft cloth only.**

  Do not use volatile fluids and/or detergents.

  The unit surface may be damaged or cracked.

  In addition, the sensors may malfunction as a result.

INSTALLATION GUIDELINES

- **During the operation of the product, please place the unit at least 2 m away from equipment utilizing electrical waves such as televisions, radios or wave clocks.**
- **Avoid use in locations where furniture, fabrics or other items may come in contact with and restrict the air intake and/or air outlet.**
- **Avoid use in locations where the unit is exposed to condensation or rapid temperature changes. (Use under appropriate conditions between 0 and 35˚C in the room.)**

  (If it is unavoidable please allow unit to stand for 1 hour before switching on.)
- **Place on a stable surface with sufficient air circulation.**

  When placing the unit on a heavily carpeted area, it may cause the unit to vibrate slightly.
- **Avoid use in locations where grease or oily smoke is generated** (such as in a kitchen, etc.)**.**

  The unit surface may crack or the sensor may malfunction as a result.
- **Place the unit about 30 cm~60 cm(1~2 ft) away from the wall in order to ensure proper airflow.**

  The wall directly behind the air outlet may become dirty over time. When using the unit for an extended period of time in the same location, periodically clean the wall and protect the wall with a vinyl sheet, etc. to prevent the wall from becoming dirty.

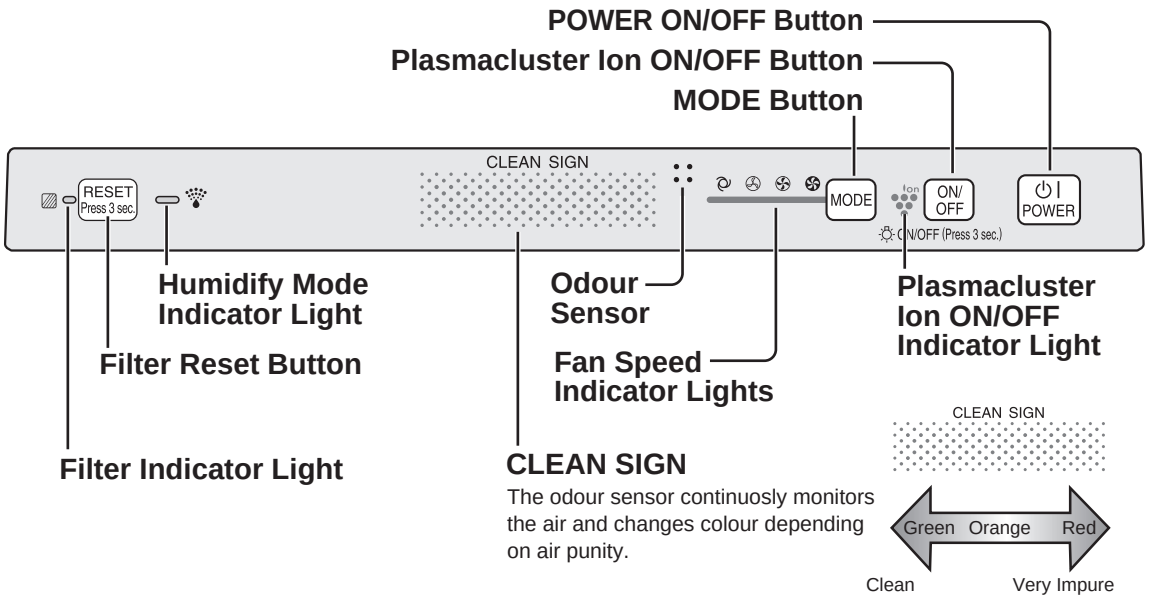
FILTER GUIDELINES

- Follow the instructions in this manual for correct care and maintenance of the filters.

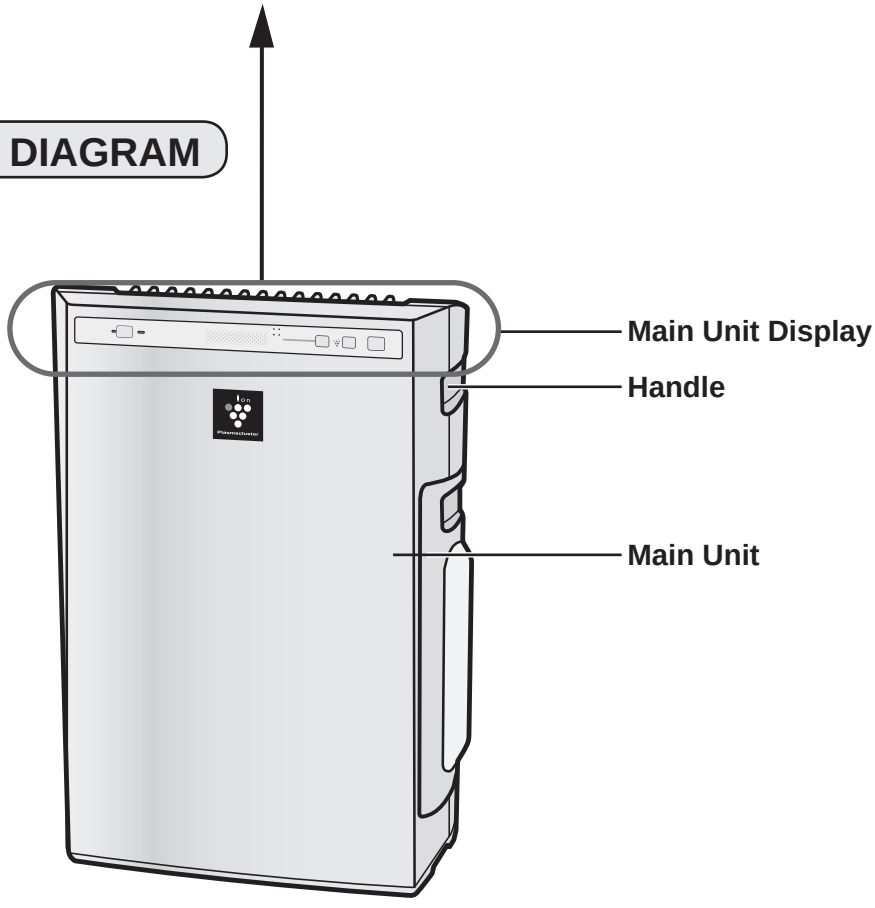
  Use only filters designed for this product.

PART NAMES

MAIN UNIT DISPLAY



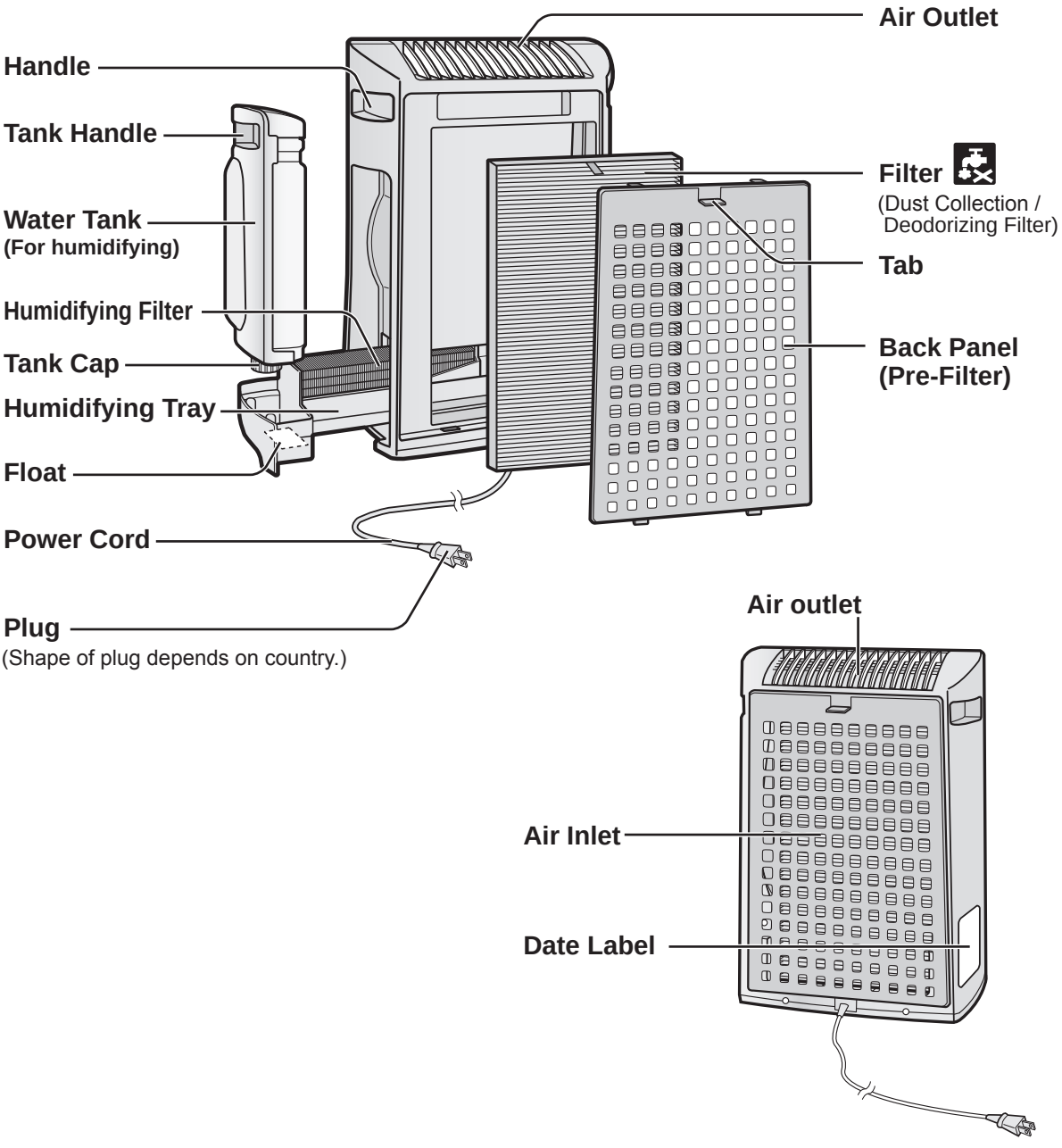
ILLUSTRATIVE DIAGRAM



INCLUDED

• Operation manual

BACK



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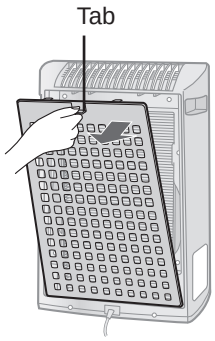
FILTER INSTALLATION

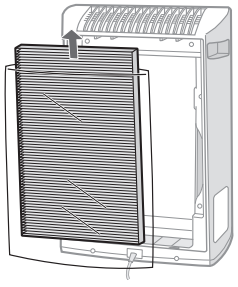
To maintain the quality of the filter, it is installed in the main unit and packed in plastic bag. Be sure to remove the filter from the plastic bag before using the unit.

1 Remove the filter

1 Remove the Back Panel.
Pull the tab at the top of the Back Panel.

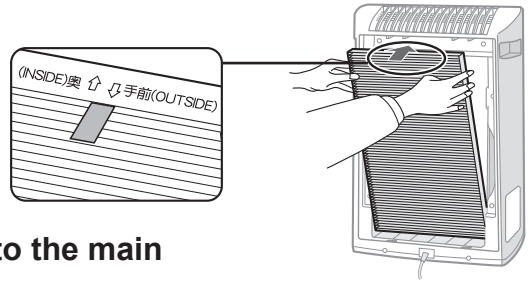


2 Remove the Filter from the plastic bag.

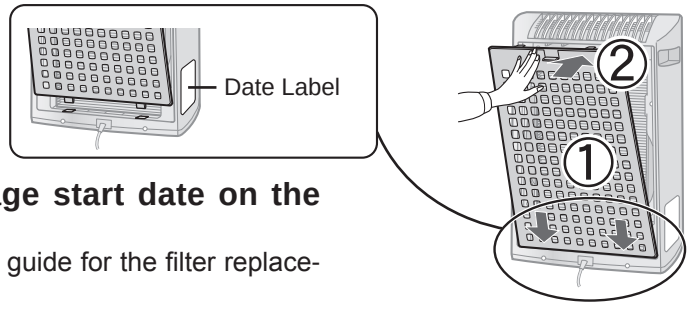


2 Intall the filter

1 Place the Filter within the main unit.
Do not install the filter backwards or the unit will not operate properly.



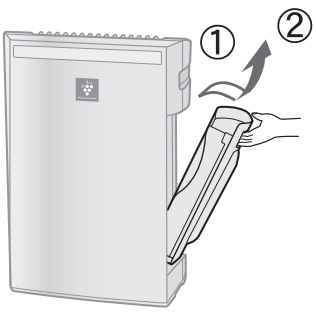
2 Replace the Back Panel to the main unit.



3 Fill in the usage start date on the Date Label.
Use the date as a guide for the filter replacement schedule.

REFILLING THE WATER TANK

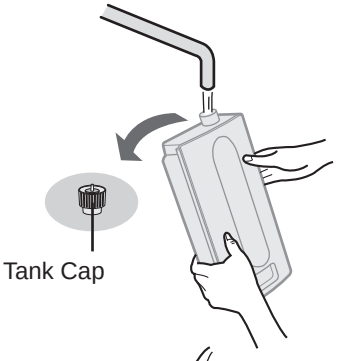
The unit can be used in the Clean Air Mode without putting water in the Water Tank. When using in the Humidify Mode, the Water Tank should be filled with water.



1 **Remove the Water Tank by unlatching the top.**

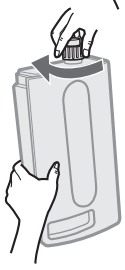
2 Remove the Water Tank Cap and carefully fill the Water Tank with tap water.

Change the water in the Water Tank every day with fresh tap water.



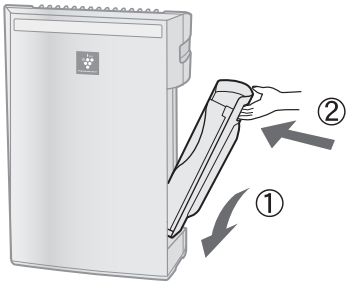
3 **After filling, securely tighten the Tank Cap.**

- Check to see that there is no water leaking.
- Be sure to wipe off any excess water on the outside of the Water Tank.
- When carrying the Water Tank, hold it with both hands so that the Water Tank opening is facing up.



4 **Replace the Water Tank in the unit.**

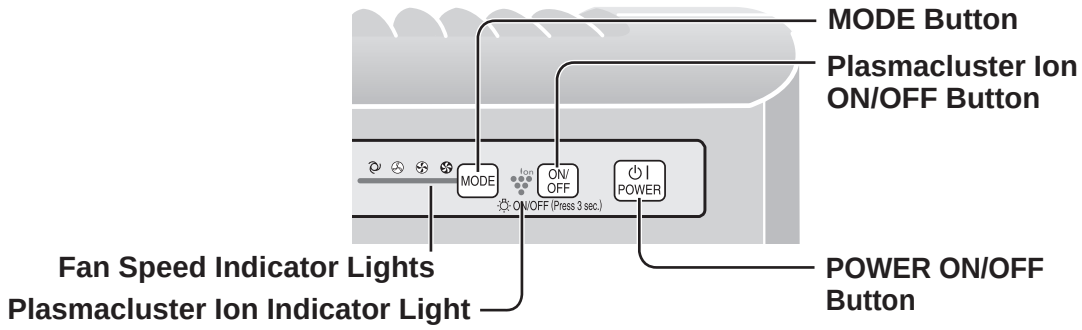
The top latch will “click” in place when the Water Tank is properly installed.



CAUTION

- Do not expose the unit to water. Short circuit and/or electrical shock may occur as a result.
- Do not use hot water (40 ºC), chemical agents, aromatic substances, dirty water, or other damaging substances, deformation and/or malfunction may occur.
- Use only fresh tap water. Use of other water sources may promote the growth of mold, fungus and/or bacteria.

MAIN UNIT OPERATION



Please select either Humidify mode or Clean air mode operation when operation when using.
Humidify mode : Fill Water Tank.(See E-00)
Clean Air mode : Drain Water Tank and Humidifying Tray.

Power ON/OFF Button

- Press to start operation (short beep) and stop operation (long beep)
- Plasmacluster Indicator Light and Fan Speed Indicator Light turn on/off.
- Unless the power cord has been unplugged, the operations starts in the previous mode it was operated in.

MODE Button

- Press the MODE Button to select the desired fan speed. Indicator Lights will show the fan speed currently selected.
- The operation mode can be switched as below.

AUTO operation
The fan speed is automatically switched (between HIGH and LOW) depending on the amount of impurities in the air. The sensors detect impurities for efficient air purfication.

LOW operation
The unit will operate quietly using minimal air intake.

MAX operation
The unit will operate at a fan speed of MAX.

MEDIUM operation
The unit will operate at a fan speed of MEDIUM.

Plasmacluster Ion ON/OFF Button

Press the Plasmacluster Ion ON/OFF Button to turn Plasmacluster Ion Mode ON and OFF.
When Plasmacluster Ion is ON, the Plasmacluster Ion Indicator Light will turn on.(blue)

CARE AND MAINTENANCE

To maintain optimum performance of this air purifier, please clean the unit including the sensor and filters periodically.
When cleaning the unit, be sure to first unplug the power cord, and never handle the plug with wet hands. Electrical shock and/or bodily injury may occur as a result.

FILTER INDICATOR LIGHT

Care Cycle	After 720 hours of use (30days × 24hours = 720)

The Filter Indicator Light will illuminate as a reminder to perform maintenance of the Back Panel, Sensors, and Humidifying Filter. The Indicator Light will turn on after approximately 720 hours of use.

After performing maintenance, reset the Filter Indicator.

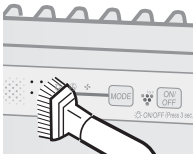
1 Plug the unit in, turn power ON.

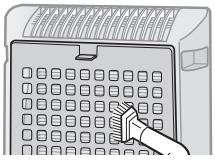
2 Press the RESET button for 3 seconds.
- The Filter Indicator Light will go off.
- Even if the Filter Indicator Light is already off, the RESET button should be pressed to reset the maintenance timer.

BACK PANEL and SENSORS

Care Cycle	Whenever dust accumulates on the unit or every 2 months

Gently remove dust from the sensor opening and the back panel, using a vacuum cleaner attachment or similar tool.



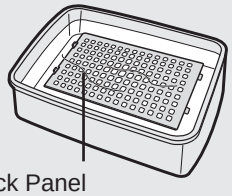


<When the back panel has stubborn dirt>

1 In case of heavy dirt, soak the back panel in water with a small amount of kitchen detergent.
(Approx. 10min.)
(Avoid scrubbing the back panel hard when washing.)

2 Rinse the back panel repeatedly with clean water to remove the solution residue.

3 Drip dry filter to remove excess water.


Back Panel

ENGLISH

CARE AND MAINTENANCE

WATER TANK

Care Cycle **Every day when Humidifying**

Rinse the inside of the tank by leaving a small amount of luke-warm water inside, closing the tank cap firmly, and shaking the tank. Mild household detergents may be used to clean the inside of the tank, but detergent should be diluted and the tank should be thoroughly rinsed to remove all detergent residue.
(Note the Water Tank is not dishwasher safe.)

UNIT

Care Cycle **Whenever dust accumulates on the unit or every 2 months**

To prevent dirt or stains on the unit, clean regularly. If stains are allowed to remain, they may become difficult to remove.

Wipe with a dry, soft cloth
For stubborn stains or dirt, use a soft cloth dampened with warm water.

Do not use volatile fluids
Benzene, paint thinner, polishing powder, may damage the surface.

Do not use detergents
Detergent ingredients may damage the unit.

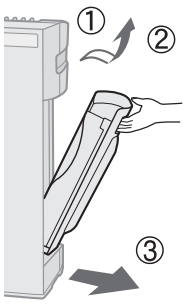
HUMIDIFYING TRAY

Care Cycle 1 month

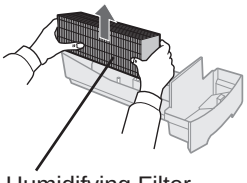
Frequency of maintenance cycle will depend on the hardness of the water. Avoid spilling water when removing or cleaning the tray.

1 Remove the Water Tank and Humidifying Tray.

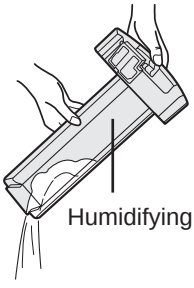
Unlatch the Water Tank first, then remove the tray. Use both hands when pulling out the Humidifying Tray to avoid spilling water.



2 Remove the Humidifying Filter from the Humidifying Tray. Drain accumulated water by tilting the Humidifying Tray slowly.



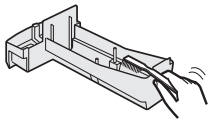
Humidifying Filter



Humidifying Tray

3 Rinse the inside of the Humidifying Tray with lukewarm water to remove impurities.

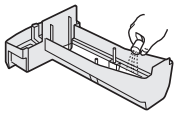
- Do not remove the Styrofoam float.
- Clean difficult-to-reach parts with a cotton-tipped swab or tooth brush.



When Water Deposits are Difficult to Remove

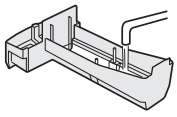
1 Fill Humidifying Tray halfway with lukewarm water, add a small amount of mild kitchen detergent, and leave to soak for about 30 minutes.

Dilute detergent according to instructions on the container. Clean difficult-to-reach parts with a cotton swab or tooth brush.



2 Rinse the Humidifying Tray with lukewarm water.

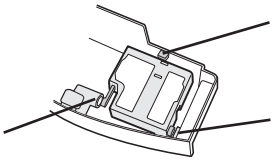
- Rinse until all detergent residue is removed.
- Inadequate rinsing may cause the detergent odour or changes in the shape/colour of the main unit.



CAUTION

- Use only mild kitchen detergents to clean the Humidifying Tray. Use of non-designated chemicals or detergents can cause deformation, tarnishing, cracking (water leakage).

If the Styrofoam float comes off, replace by inserting the tabs of the Float into the holes in the Humidifying Tray as shown in the diagram.



① Insert the float below this tab.

② Insert the tab of the float into the hole.

③ Insert the tab on the other side of the float into the hole.

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CARE AND MAINTENANCE

When cleaning the unit, be sure to first unplug the power cord, and never handle the plug with wet hands. Electrical shock and/or bodily injury may occur as a result.

HUMIDIFYING FILTER

Care Cycle **Once a month or when the Filter Indicator Light is on.**

Frequency of maintenance cycle will depend on the hardness or the impurities of the water that you use; the harder the water the more often descaling will be necessary.

Pay attention not to spill water when cleaning the filter.

1 Remove the Water Tank and Humidifying Tray.
(See E-11)

2 Remove the Humidifying Filter from the Humidifying Tray.

Avoid spilling water from the Humidifying Tray.

3 Preparing the descaling solution.

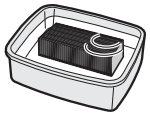
Citric acid, available at some drugstores, or 100 % bottled lemon juice are used for descaling. Choose either one to use, and prepare the descaling solution.

<For using citric acid>
Dissolve 3 teaspoons of citric acid and 2 1/2 cups of lukewarm water in a suitable container, and stir well.

<For using lemon juice>
100 % bottled lemon juice can be used for descaling. Use only 100 % bottled lemon juice with no pulp (strain juice if necessary). Combine 1/4 cup lemon juice and 3 cups of lukewarm water in a container large enough to hold the Humidifying Filter and stir well.

4 Pre-soak the Humidifying Filter in the solution for 30 minutes before cleaning.

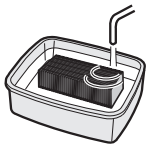
When using lemon juice, it is recommended to pre-soak longer than citric acid.



5 Rinse the Humidifying Filter repeatedly with lukewarm water to remove all the solution residue.

Inadequate rinsing may cause odour and affect the performance and/or appearance of the unit.

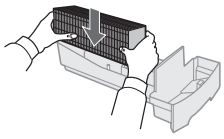
* Do not scrub the Humidifying Filter, rinse gently under lukewarm water only.



6 Attach the Humidifying Filter to the Humidifying Tray, and replace the Humidifying Tray in the unit.

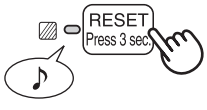
- The Humidifying Filter dose not need to be oriented in any particular position(forward/backward, up/down)

- When not using the unit for a long periods of time, dry the Humidifying Filter completely before replacing.



7 Plug in the unit, turn power ON, and press the Filter Reset Button on the display for more than 3 seconds to reset.

You may notice reddish-brown or white deposits forming on the surface of the Humidifying Filter. These impurities (calcium, etc.) are due to the impurities contained in tap water; this is not a defect. Replace the Humidifying Filter when it is covered completely in white deposits.



FILTER REPLACEMENT GUIDELINES

Filter life vary depending on the room environment, usage, and location of the unit.
If dust or odour persist, replace the filter.
(Refer to “Please read before operating your new Air Purifier”)

Guide for filter replacement timing

- The following filter life and replacement period is based on the condition of smoking 5 cigarettes per day and the dust collection/deodorization power is reduced by half compared with that of new filter.

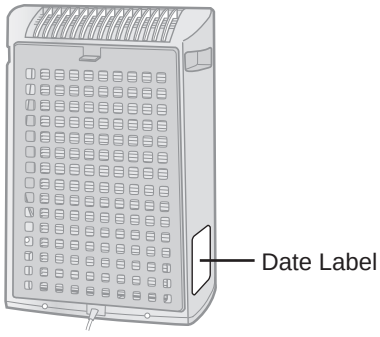
  We recommend to replace the filter more frequently if the product is used in a condition significantly severer than normal household use.

•Dust Collection / Deodorizing Filter	About 2 years after opening
•Humidifying Filter	About 1 years after opening

REPLACING THE FILTER

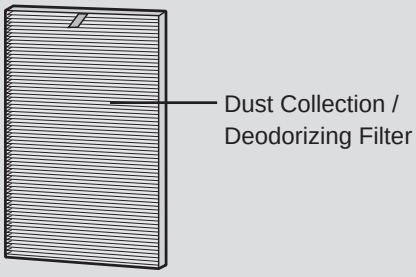
1 **See page E-6,7 and E-11,12 for directions on how to install the filter when replacing.**

2 **Fill in the usage start date of the filter on the Date Label**.

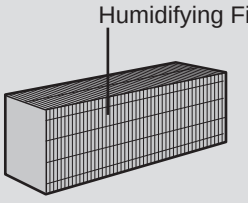


Replacement Filters

Model : FZ-Y30SFE
•Dust Collection / Deodorizing Filter : 1 unit



Model : FZ-Y30MFE
•Humidifying filter : 1 unit



Please consult your dealer for purchase of replacement filter.

Disposal of Filter

Please dispose of the replaced filter according to the local disposal laws and regulations.

Dust Collection / Deodorizing Filter materials :
•Filter : Polypropylene
•Frame : Polyester
•Deodorizer : Activated charcoal
Humidifying Filter materials :
•Rayon, Polyester

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TROUBLESHOOTING

Before calling for service, please review the Troubleshooting chart below, since the problem may not be a unit malfunction.

SYMPTOM	REMEDY (not a malfunction)	
Odours and smoke are not removed.	• Clean or replace the filters if they appear to be heavily soiled. (See E-9,E-14)	
The Clean Sign illuminates green even when the air is impure.	• The air could be impure at the time the unit was plugged in. Unplug the unit, wait one minute, and plug the unit in again.	
The Clean Sign illuminates orange or red even when the air is clean.	• Sensor operation is affected if the odour sensor openings are dirty or clogged. Gently clean the dust sensors. (See E-9)	
A clicking or ticking sound is heard from the unit.	• Clicking or ticking sounds may be audible when the unit is generating Plasumacluster ions.	
The discharged air has an odour.	• Check to see if the filter are heavily soiled. • Clean or replace the filter. • Plasmacluster Air Purifiers emit small traces of ozone which may produce an odour.	
The unit does not operate when cigarette smoke is in the air.	• Is the unit installed in a location that is difficult for the sensor to detect cigarette smoke? • Are the dust sensor openings blocked or clogged? (In this case, clean the openings.) (See E-9)	
Filter Indicator Light is illuminated.	• After replacing filters, connect the power cord to an outlet and press the Filter Reset Button. (See E-9)	
The Clean Sign are turned off.	• Check to see if the Lights OFF Mode selected. If so, then press the Lights Control Button to activate the indicator lights. (See E-10)	
The Humidify Mode Indicator Light does not illuminate when the tank is not empty.	• Check Styrofoam float for impurities. Clean the HumidifyingTray. Ensure unit is located on a level surface.	
Water level in the tank does not decrease or decreases slowly.	• Check to see if the Humidifying Tray and Water Tank are correctly installed. Check the Humidifying Filter. • Clean or replace the filter when it is heavily soiled. (See E-11, E-12, E-13)	
The Clean Sign lights change colour frequently.	• The Clean Sign lights automatically change colours as impurities are detected by the dust sensor and odour sensor.	
Flashing of the Fan Speed Indicator Light ' ⊛ '.	• Abnormal fan motor	• Turn power OFF to cancel the error display, wait one minute, and then turn power ON.

SPECIFICATIONS

Model		KC-930E		
Power supply		220-240V 50/60Hz		
Fan Speed operation	Fan Speed Adjustment	MAX	MED	LOW
	Rated Power	27W	13W	4.5W
	Fan Speed	180m³/hour	126m³/hour	60m³/hour
	Humidification	350ml/hour	250ml/hour	140ml/hour
Recommended Room Size		~21m² *1		
High density Plasmacluster ion recommended room size		~17m² *2		
Water tank capacity		2.1L		
Sensor		odour sensor		
Filter type		Dust Collection / Deodorizing Filter		
Cord Length		2.0m		
Dimensions		375mm(W)x205mm(D)x535mm(H)		
Weight		6.1kg		

*1 Size of a room which is appropriate for operating the unit at maximum fan speed.
•It indicates the space where a certain amount of dust particles can be removed in 30 minutes(JEM1467).

*2 Size of a room in which approximately 7000 ions can be measured per cubic centimeter in the center of the room (at a height of approximately 1.2 meters from the floor) when the product is placed next to a wall and run at the MAX operation position.

Standby Power In order to operate the electrical circuits while the power plug is inserted in the wall outlet, this product consumes about 0.9W of standby power.
For energy saving, unplug the power cord when the unit is not in use.

The class of the HEPA filter by EN 1822 is H10.

ENGLISH

Memo

SHARP

SHARP CORPORATION

OSAKA, JAPAN

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